

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-20. Cancelled.

21. (Currently Amended) A system that monitors physiological states, comprising:
a power supply;
a resonant circuit that induces an oscillating magnetic field in response to receiving energy from the power supply and that provides a signal characteristic of a power loss of the resonant circuit due to a volume of interest of a human subject in the magnetic field where the resonant circuit does not surround any perimeter of the human subject; and

a detector that detects evaluates the signal and uses a result of the evaluation to determine if the human subject is experiencing an abnormal condition, wherein the signal is used to monitor a physiological state of the human subject; and

an alarm system that generates an alarm signal in response to determining that the human subject is experiencing an abnormal condition, where the alarm signal is transmitted to a remote station.

22. (Previously presented) The system of claim 21, wherein the entire resonant circuit resides within a sub-portion of a front side of clothes worn by the subject.

23. (Previously presented) The system of claim 21, the resonant circuit, comprising:
a coil having conductors, wherein the resonant circuit is integrated into an insulating fabric carrier and the conductors are interwoven with threads of the insulating fabric carrier.

24. (Previously presented) The system of claim 21, wherein the resonant circuit is integrated into a bandage configured to be affixed to the human subject.

25. (Previously presented) The system of claim 21, further comprising:
a second resonant circuit that induces a magnetic field in a reference volume of the subject and that provides a second signal characteristic a state of the reference volume.
26. (Previously presented) The system of claim 25, wherein the volume of interest is an extremity of interest of the human subject and the reference volume is a known healthy complementary extremity of the human subject, and a comparison of the signal and the second signal is used to monitor a health of the extremity of interest relative to the reference extremity.
27. (Previously presented) The system of claim 21, wherein the signal is characteristic of blood flow of the human subject.
28. (Previously presented) The system of claim 21, wherein the signal is characteristic of edema.
29. (Cancelled)
30. (Previously presented) The system of claim 21, wherein the signal is characteristic of a respiration rate of the human subject.
31. (Previously presented) The system of claim 21, wherein the resonant circuit is integrated into clothing worn by the subject.
32. (Previously presented) The system of claim 21, wherein the resonant circuit is integrated into a bed sheet.
33. (Previously presented) The system of claim 21, wherein the resonant circuit is integrated into furniture.

34. (Cancelled)

35. (Currently Amended) A method for monitoring physiological states, comprising:
placing a resonant circuit near a volume of interest of a human subject so that a magnetic field produced by the resonant circuit induces an electric field in the volume of interest, wherein the resonant circuit is located only on a front side of the subject;

detecting a reference signal produced by the resonant circuit, wherein the reference signal is a normal state of a characteristic of the human subject characteristic of a power loss of the resonant circuit due to the volume of interest;

detecting a condition signal produced by the resonant circuit, wherein the condition signal is a current state of the characteristic of the human subject, and

using the detected signal to determine a physiological state of the subject comparing the reference signal and the condition signal to determine if the human subject is experiencing an abnormal physiological condition.

36. (Previously presented) The method of claim 35, wherein the resonant circuit is part of clothing worn by the subject.

37. (Previously presented) The method of claim 35, wherein conductors of the resonant circuit are interwoven with threads of an insulating fabric carrier worn by the subject.

38. (Previously presented) The method of claim 35, wherein the resonant circuit is integrated into a bandage worn by the human subject.

39. (Cancelled).

40. (Previously presented) A method, comprising: determining a physiological state of a heart of a human based on a signal generated by a resonant circuit that induces a magnetic field in the heart, wherein the resonant circuit is located only on a chest of the human and proximate to the heart.

41. (New) The system of claim 21, where the alarm signal is a radio frequency (RF) signal.
42. (New) The method of claim 35, comprising:
generating an alarm signal in response to determining that the human subject is experiencing the abnormal physiological condition, where the alarm signal is transmitted to a remote station and wherein the reference signal and condition signal are produced from the same coil of the resonant circuit.
43. (New) The method of claim 40, wherein the signal is a condition signal, wherein the determination of the physiological state is based, at least in part, on a comparison result between the condition signal and a reference signal, and wherein the reference signal and condition signal are based on functioning from a single coil of the resonant circuit at a single location.